

IP-427

S-E-C-R-E-T

CENTRAL INTELLIGENCE AGENCY  
 Office of the Chief, Economic Research  
 Office of Research and Reports

Project Action Memorandum

Project No. 20.1030  
 Date: 20 January 1956

TYPE: Free World versus Sino-Soviet Bloc Energy Availability

REQUESTER: DCI

STATEMENT OF THE PROBLEM AND TERMS OF REFERENCE:

Problem: To compare energy availability in the US and USSR and in the Free World and Sino-Soviet Bloc, stressing relative rates of growth.

Terms of Reference: The project will result in a memorandum to the DCI with accompanying page-size charts.

RESPONSIBILITY:

	<u>Man-hours</u>	<u>Due Dates</u>	<u>Concurrence (Initials)</u>
Action Division: D	100	25 Jan 56	<u>HM</u>
Branches: M	75	24 Jan 56	
	75	24 Jan 56	

Staff: Staff

Principal Analyst: [REDACTED] x3843

Project Monitor: [REDACTED] x2803

This project will delay completion of Projects 25.676, 25.683 and 10.803 by one week each.

The classification of this project will be no higher than SECRET.

APPROVED E.La Ch/E

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Table 1. Primary Energy Production for Selected Years and Growth Rates for Selected Periods  
Sino-Soviet Bloc vs. Free World by Principal Regions and Categories

Trillions of BTU (approx.)

Item No.	Region and Category	1940 Production	1946 Production	Aver. Ann. Growth, % 1941-46	1950 Production	Aver. Ann. Growth, % 1947-50	1955 Production	Aver. Ann. Growth, % 1951-55	1960 Production (Plan or Forecast)	Aver. Ann. Growth, % 1956-60
<b>I Sino-Soviet Bloc</b>										
1. USSR - Total		7,016	6,198	-2.1	9,693	11.8	13,760	7.3	22,610	10.4
a. Solid fuels		5,510	5,080	-1.4	7,770	11.2	10,230	5.7	15,030	8.0
b. Oil and gas		1,490	1,100	-4.9	1,880	15.0	3,150	12.9	7,380	16.4
c. Hydroelectric power		16	18	2	43	22.4	80	13.2	200	20.2
2. European Satellites <sup>a</sup> - Total		5,304	3,803	-5.4	5,383	9.1	7,604	7.1	9,930	5.5
a. Solid fuels		4,960	3,150	-5.9	4,930	9.3	6,660	6.2	8,750	5.6
b. Oil and gas		340	346	0.3	446	6.6	930	15.8	1,160	4.5
c. Hydroelectric power		4	7	10	7	0	11	15	20	7.4
3. Communist China b/		1,500	579	-11.7	1,244	21.1	2,476	14.8	3,820	9.1
a. Solid fuels		1,490	560	-15.0	1,220	21.5	2,440	14.9	3,700	8.7
b. Oil and gas		9	4	4	4	0	20	38	70	28.5
c. Hydroelectric power		10	15	7	20	7	16	4	50	26.2
4. Sino-Soviet Bloc - Total		13,820	10,580	-4.4	16,320	11.4	23,840	7.9	36,350	8.8
a. Solid fuels		11,960	9,090	-4.5	13,920	11.2	19,330	6.8	27,480	7.3
b. Oil and gas		1,830	1,450	-3.2	2,330	12.6	4,100	13.5	8,610	14.4
c. Hydroelectric power		30	40	5	70	15	110	9.5	270	19.7
<b>II Free World</b>										
1. US - Total		24,810	31,210	3.9	34,320	2.4	38,520	2.3	44,900	3.1
a. Solid fuels		13,580	15,810	2.6	14,860	-1.5	13,020	-2.6	14,020	1.5
b. Oil and gas		11,020	15,080	5.4	19,070	6.0	25,050	5.6	30,400	3.9
c. Hydroelectric power		210	320	7.3	390	5.1	450	2.9	480	1.3
2. Free World less US - Total		24,000	21,400	-1.9	29,310	8.2	36,760	4.6	45,620	4.4
a. Solid fuels		20,220	15,750	-4.1	19,060	4.9	20,210	1.2	21,350	1.1
b. Oil and gas		3,330	5,190	7.7	9,580	16.6	15,190	10.1	22,700	7.9
c. Hydroelectric power		450	1,600	0.4	670	9.9	1,060	9.6	1,570	8.2
3. Free World - Total		48,810	52,610	1.3	63,630	4.9	75,280	3.4	90,520	3.8
a. Solid fuels		33,800	31,560	-1.1	33,920	1.8	33,230	-0.4	35,370	1.3
b. Oil and gas		14,350	20,270	5.9	28,650	9.0	40,540	7.2	53,100	5.5
c. Hydroelectric power		660	780	2.8	1,060	8.0	1,510	7.3	2,050	6.3
<b>III Relationships in the Production of Primary Energy (Percent)</b>										
1. Sino-Soviet Bloc/Free World		28.3	20.1		25.6		31.7		40.2	
2. USSR/US		28.3	19.9		28.2		35.7		50.4	

a. For 1940 and 1946, data cover same countries as in 1950, 1955 and 1960.  
b. Includes North Korea, Outer Mongolia and Viet Minh.  
c. Less than 0.5 trillion BTU.  
d. Not computed.

8 February 1956

The USSR is <sup>just</sup> beginning to utilize natural <sup>gas</sup> produced with <sup>gas</sup> rather than waste it. The Sixth Five-Year Plan calls for increasing natural gas production from 8.1 million metric tons in 1955 -- ~~11 percent of liquid~~ petroleum production to 32 million metric tons in 1960 -- ~~equal to one quarter of liquid petroleum~~ production. In contrast, US natural gas production was 200 million metric tons in 1955 -- ~~over half liquid petroleum~~ production.

TRANSMITTAL SLIP

25 Jan 56

STATINTL

TO:		
ROOM NO.	BUILDING	
REMARKS:		
<p>Attached are 3 copies of "Energy Availability" draft.</p> <p>Graphics should be completed tomorrow.</p>		
FROM: [REDACTED]		
ROOM NO.	BUILDING	EXTENSION 3011

FORM NO. 241  
1 FEB 55REPLACES FORM 36-8  
WHICH MAY BE USED.

(47)

A significant difference between the US and USSR is in the relative productions for use of natural gas. In both countries large quantities of natural gas are cutbacks from underground deposits in the production of oil. In the US nearly all of this gas is now recovered and utilized while in the USSR nearly all of it is wasted. For example in 1955 the ratio of natural gas to oil (including natural gas liquids) was 200/365 or 0.55, in the US, while in the USSR this ratio was 8.1/70 or 0.116. The USSR 6th. FY Plan calls for a very large increase in natural gas production, from 8.1 million ton in 1955 to 37 million metric tons in 1960. This can only be accomplished if very extensive natural gas trunks lines planned, are actually built.

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32	32	32	32	32
135	135	135	135	135
270	270	270	270	270
500	500	500	500	500
505134	505134	505134	505134	505134
93600	93600	93600	93600	93600
945	945	945	945	945
X	X	X	X	X
40	40	40	40	40
0.064	0.064	0.064	0.064	0.064
68	68	68	68	68
544	544	544	544	544
55.64	55.64	55.64	55.64	55.64

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